

# Joint Deployable Intelligence Support System (JDISS) Joint Program Office (JPO)

TPOC Briefing January 2002

## **TOPICS**



• JDISS 3.3.2\*

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• JDISS 4.x

POC: Lt Jim Reese, JDISS Infrastructure, 301-669-2974

• CMMA v1.5\*

POC: LCDR Christopher Page, JDISS CMMA Project Office, 301-669-5297

• SCI GCCS-I<sup>3</sup> v3.5

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\*Applying for "No Test" Waivers



## JDISS 3.3.2 and JDISS 4.X

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# Proposal for DoDIIS Testing and Certification

# JDISS 3.3.2 NT Workstation/Client/Server Minor Release



- Represents Minor release upgrade of JDISS 3.3 (Certified in 2000)
- Implements Windows Installer to support abbreviated COE segments; support for full COE segments retained
- JDISS Security Segment changes
  - Implements Windows NT Security Configuration Editor (SCE) in place of custom DLL's and batch files.
  - Relieves security-related network bottleneck (enables, but no longer requires the "Requires Security Signature" for network comms between Windows platforms)
  - Relieves audit overflow problem (Increased audit log file size from 8MB to 1GB; disabled "Crash on audit failure" setting)
  - Fewer manual TFM steps; most security configuration settings now automated
- Eliminates need to remove/reinstall security segment to install new mission applications
- Implements automated (Sysprep Ghost) Installation
- Applying for "No Test" Waiver

# JDISS 4.x Windows 2000-XP Infrastructure capabilities...



- ...reduce the cost and time to integrate mission applications
- ...provide an easy-to-install Windows XP-based infrastructure
- ...provide segments "loadable" locally (individual machines) or remotely (across an enterprise)
- ...provide segments "loadable" on JDISS or Non-JDISS Windows 2000/XP-based infrastructures
- ...readily accommodate, installation of DII COE compliant segments built by other DoD or IC programs
- ...implement a revised JDISS COTS License Management (LM) model
- ...will be SCI certified and DoDIIS approved
- ...implement PKI encryption technology, JIVA capabilities, DMS-capable communications tools and products...

# JDISS 4.x Windows 2000-XP Infrastructure capabilities (cont)...



- ...provide workstations that can be integrated into (non-JDISS) COEbased, AFDI-based, or site unique windows NT or Windows 2000 domains
- ...support interfaces to service C4I systems and major IC systems and databases
- ...will be interoperable with GCCS and provide ability to display GCCS COP
- ...will be consistent with DoDIIS and IC directions for Windows 2000 and Windows XP
- ... allow remote execution of System Administration functions
- ...will be exportable to Allied Nations, will support foreign-language features
- ...will be deployable in different implementations, i.e., stand-alone JDISS laptop, large enterprises

# JDISS 4.0 Windows XP Infrastructure - A Bridge from v3.3.x



#### JDISS 4.0 MISSION APPLICATIONS (Reused 3.3.x Tools)

#### TIER 2

#### **Licensed COTS:**

- Map Display (ARCView)
- MIDB Data Plot (ARCView Option)
- Imagery (ELT, Remote View)
- Dig. Photography (Adobe Photoshop)
- Video Clip Tool
- TCP/IP Tools (Hummingbird Exceed)
- ARCView Options (e.g. GeoRover)
- Other COTS

#### TIER 2

#### Non-Licensed GOTS/Freeware:

- Map Display (C2PC Suite, Falcon View)
- MIDB Data Plot (GCCS-I3 Intel Office)
- Imagery (GCCS-I3 Imagery Suite)
- Targeting (JTT Suite)
- ISR Management (SRMT Suite)
- Collection Management (ACPG)
- Other GOTS/ Freeware

#### JDISS 4.0 LAPTOP / WORKSTATION / CLIENT

#### **BASELINE / TIER 1**

-JDISS 3.3.X Infrastructure Segments (e.g. JDISS Desktop and Utilities, MS Chat, Netscape, Adobe Acrobat and Frame, Norton Anti-Virus, JCE, Perl)

JAVA Virtual Machine (JVM) - New for Windows XP

Microsoft Office 2000 Professional (Updated from JDISS 3.3.1 Segment)

JDISS 3.3.X Account Group (Updated from JDISS 3.3.1 Segment)

JDISS 3.3.X License Manager (Still FlexLM - Updated from JDISS 3.3.1 Segment)

JDISS Security Settings (New for Windows XP)

DII COE 4.2.0.5 Kernel

Microsoft Windows XP Professional (Enterprise License version), includes Internet Explorer Browser

# JDISS 4.1 Windows 2000-XP Infrastructure - Full Client/Server Release



### **JDISS 4.1 MISSION APPLICATIONS**

#### TIER 2

Licensed COTS
Mission Applications Segments

#### TIER 2

Non-Licensed GOTS/Freeware Mission Applications Segments

### JDISS 4.1 LAPTOP/WORKSTATION/CLIENT/SERVER

#### BASELINE/TIER 1

"Option 1"

JDISS 4.X Infrastructure Segments (New)

JDISS 4.X License Manager (New)

JDISS Security Settings (Updated)

Microsoft Infrastructure by JDISS\*

Windows XP\* (workstations)
Windows 2000\* (servers)

\* Enterprise License version

#### **BASELINE TIER 2**

"Option 2"

JDISS 4.X Infrastructure Segments (New) \*\*

JDISS 4.X License Manager (New)

Site-unique Security Config. \*\*

Site-unique Microsoft Infrastructure\*\*

Windows XP or Windows 2000\*\*

\*\* installed at site discretion

## JDISS 4.x Release Schedule



# JDISS 4.0 Laptop/Workstation/Client

- Interim release (Win2k/WinXP Professional Implementation)
- Accelerated for Operation Enduring Freedom and Homeland Defense
- Target release 3QFY02

# JDISS 4.1Laptop/Workstation/Client/Server

- Full Win2k/WinXP Professional and Server Implementation
- Will Supercede 4.0
- Target release 1QFY03

# Testing and Certification for JDISS 3.3.2 & 4.x



- JDISS 3.3.2: Requesting "No Test" waiver to support urgent operational requirements; JTPM: 30 Jan 02
- JDISS 4.0: Requesting accelerated T&E process to support urgent operational requirements; JTPM: 30 Jan 02
  - Currently working build schedule. Estimate configuration ready to enter JITF/JITC/Security testing in 3QFY02
  - Perform accelerated set of T&E activities.
  - Beta II Site TBD
- JDISS 4.1: Normal T&E Process. Estimate configuration ready to enter JITF/JITC/Security testing in 4QFY02.



# Collection Management Mission Applications (CMMA) Incremental Upgrades

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Proposal for DoDIIS Testing and Certification

# CMMA Topics



- Review of Current CMMA V1.0
- Proposed CMMA V1.5
- Testing and Certifying CMMA V1.5

# **Collection Management Mission Applications (CMMA)**



## CMMA V1.0

### CMMA v1.0 Review



- Certified AUG 2001; now in fielding
- CMMA commissioned by MIB in Aug 2000 in response to recommendations of ISSG
- Goal to provide "80% solution" for delivery of CM functionality to DCCC, Regional JIC's
- Initial objective to give users that 80% by leveraging existing capabilities present in the BVI, JCE, Malolo, and PRISM Projects
- CMMA v1.0 satisfied initial objective by delivering a system highlighted by two configuration items:
  - JDISS 3.3.1 NT Collection Management Workstation (CMWS) v1.0: High-end workstation providing single point of access for BVI, JCE, Malolo, PRISM, other applications
  - JDISS 2.01.3 Solaris PRISM Regional Web Server (PRWS) v1.0: Mid-range server providing host platform for PRISM web application and associated databases

## CMMA v1.0 Milestones/Status



- CMMA v1.0 underwent T&E between Feb 01 and Jul 01
- In Aug 2001, DMB authorized operational implementation
- Implementation began in early Sep 01 with fielding to DCCC
- Fielding accelerated after 11 Sep attacks and issuance of requirements by CENTCOM and other unified commands
- Today, 33 CMWS and 6 PRWS assets are operating at 17 locations and supporting approximately 200 trained users
- CMWS, PRWS, and and user counts are expected to continue growing throughout 2002



# **Proposed CMMA V1.5**

## CMMA v1.5 Overview



- Minor release upgrade of CMMA v1.0 series
- USCENTCOM has issued urgent wartime requirements for functional upgrades of CMMA v1.0
- CMMA v1.5 will address the following:
  - Integration of collection planning functionality
  - Integration of expanded SIGINT functionality
  - Improving interoperability between CMMA apps
  - Replacement of legacy Oilstock map display (for Malolo)
- Remains on same infrastructure (JDISS 3.3.x NT/COE 3.3 and JDISS 2.01.x Solaris/CSE-SS v1.4.2) as originally certified
- Remains on same operating system (Windows NT 4.0 and Solaris 7) as originally certified

# CMMA v1.5 Software Changes



- New GOTS tool, Automated Collection Planning Generator (ACPG) will satisfy initial requirement for planning functionality
- COTS and GOTS components of BVI and PRISM collection suites will be upgraded to satisfy initial requirement for SIGINT functionality
- Improved BVI and PRISM data exchange will satisfy initial interoperability requirement
- New GOTS tool, Falcon View will replace the Oilstock map display in the MALOLO application

# CMMA v1.5 Software Changes (cont)



- CMWS v1.5 will continue to run on JDISS 3.3.1 NT infrastructure with following key changes:
  - Addition of ACPG and upgrade of BVI GOTS and COTS components
  - Replacement of Oilstock with Falcon View for the MALOLO app
- PRWS v1.5 will continue to run on JDISS 2.01.3 Solaris infrastructure with following key changes:
  - Addition of ArcIMS (GIS for the Internet, new JAVA connectors and enhanced security features) and SQS (Spatial Query Service-ability to query by Lat/Long)
  - Upgrade of PRISM web forms

# Collection Management Workstation v1.5 (CMWS) Details



## **Typical Configuration**

#### **Major Software Items:**

- ACPG (added)
- Adobe Acrobat Reader
- Adobe Frame Reader
- BVI v2.0 (updated)
- DII COE 3.3
- Falcon View (added)
- Flight Control
- JDISS 3.3.1 NT
- JIVA JCE 2.1
- Microsoft Internet Explorer
- Microsoft Office 2000 Pro
- Netscape
- Norton Anti-Virus
- Nutcracker
- Oilstock (deleted)
- Paragon ELT
- Satellite Toolkit (w/HREI)

- SL TELNET Server
- Win NT 4.0 (SP-6A)
- WinZIP
- X Vision

### **Major Networking Items:**

• 10/100 (or ATM) NIC providing JWICS access via TS/SCI LAN

#### **Major Hardware Items:**

- Dell Precis 620 (2 x1GHz PIII)
- 3.5" Floppy
- 1GB (4x256) PC600 RDRAM
- 2x36 GB SCSI 10K RPM HDD
- 20/4X CD-ROM
- Wildcat 4110 Pro Graphics
- 21" Ultrascan Monitor P1110
- Iomega Zip 250 MB Internal
- HK Speakers, Power Adapter



<u>Underlined</u> Components Changed from v1.0 baseline

**Typical Acquisition Cost:** 

\$28,000

# PRISM Regional Web Server (PRWS) v1.5 Details



## Typical Configuration

#### **Major Software Items:**

- ArcIMS (added)
- Apache Web Server
- Cold Fusion Server
- CSE-SS 1.4.2.1
- JDISS 2.01.3 Solaris
- PRISM Forms v3.0 (updated)
- Sybase ASE
- Sybase SQS (added)
- Veritas Back-Up Software

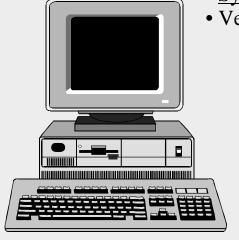
#### **Major Hardware Items:**

- Sun Enterprise 450 (w/extra CPU's)
- 4x36GB HDD
- GB Ethernet Network Adapter

#### **Major Networking Items:**

 GB Ethernet NIC providing JWICS access via TS/SCI LAN

<u>Underlined</u> Components Changed from v1.0 baseline



Typical Acquisition Cost: \$89,000

# Testing and Certification for CMMA v1.5



- Requesting "No Test" Waiver to support urgent operational requirements. JTPM scheduled 23 Jan 02.
- If "No Test" Denied:
  - Intend to have new CMWS and PRWS builds ready for T&E by end of Mar 02
  - Would like to perform accelerated set of T&E activities between Apr
     02 and May 02
  - USCENTCOM willing to serve as Beta II site



# SCI Global Command and Control System-Integrated Intelligence and Imagery (SCI GCCS-I³)

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Proposal for DoDIIS Testing and Certification

# SCI GCCS-I<sup>3</sup> Topics



- System Overview
- Current Release, SCI GCCS-I3 (v3.4)
- New Release, SCI GCCS-I<sup>3</sup> (v3.5)
- Testing and Certifying SCI GCCS-I<sup>3</sup>
   v3.5



# SCI GCCS-I<sup>3</sup> System Overview

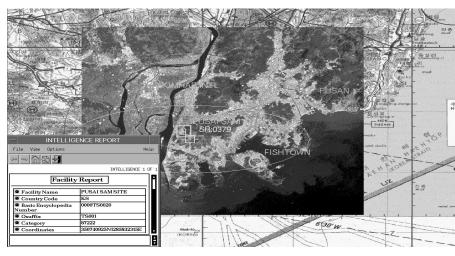
# Common Intelligence Picture (CIP) vs. Common Operating Picture (COP)

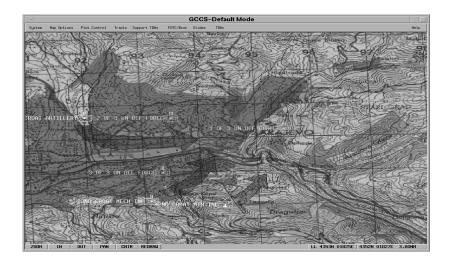


- J2 GCCS I<sup>3</sup> CIP integrates the GCCS COP with SCI data sources:
  - Near Real Time Intel (NRTI) and other SIGINT
  - Integrated Intelligence
    - MIDB/C&P
    - Target Data
  - Integrated Imagery
  - Collection Management

- Guard Technology synchs data
  - `between ' CIP and COP

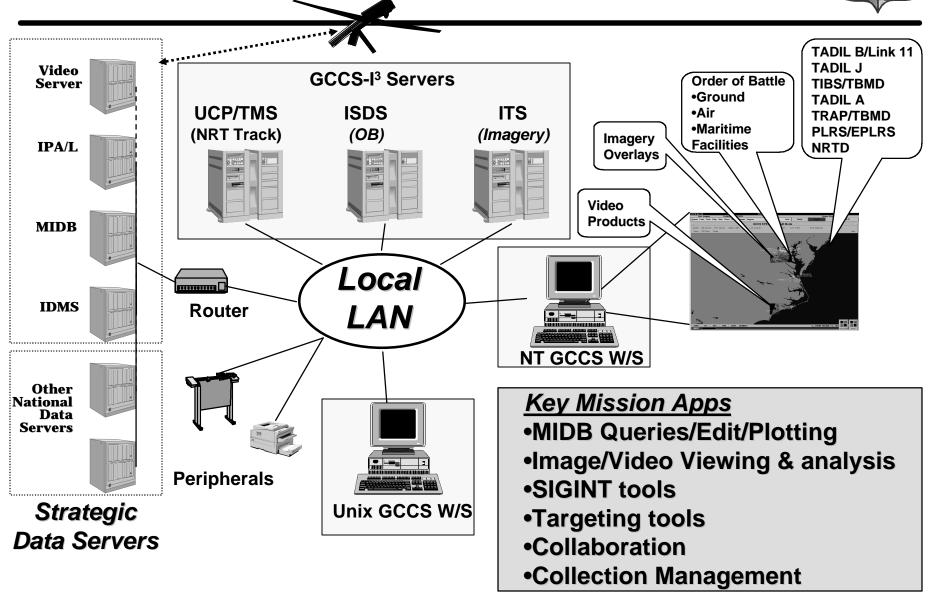
- J3 GCCS COP provides:
  - GENSER Track data
  - Maps
  - Overlays
  - -ATO
  - Weather





# SCI GCCS-I3 System Components







# Current SCI GCCS-I<sup>3</sup> v3.4

## SCI GCCS-I<sup>3</sup> v3.4 Overview



- SCI GCCS-I3 commissioned by MIB in May 2001 in response to recommendations of ISSG
- Initial FY02 objective:
  - Take post-assessment ISSG Proof of Concept III SCI GCCS-I3 (aka v3.4)
     baseline through DoDIIS Test and Evaluation
  - Field SCI GCCS-I3 to three JICs
  - Provide sustainment services for fielded baseline
- SCI GCCS-I3 v3.4 configuration items:
  - SCI GCCS-I3 UNIX Server Suite: Mid-Range Server that provides NRT Track,
     OB, and GIS Data to site enterprise
  - SCI GCCS-I3 UNIX [or NT] Client: provides client-side intelligence applications to access and modify data on servers

## SCI GCCS-I<sup>3</sup> v3.4 UNIX Server



# Configuration

#### **Major Software Items:**

**Basic Build** 

- Solaris 2.5.1 (rev A 11/97)
- DII COE 3.3
- Support Utilities

NRT Track

- Unified Build 3.0.2.5
- JMTK 1.0.0.10
- Data Link Interfaces
- COP Management Software Intel Shared Data Server
- Sybase 11.X
- GMIDB (and others)
- Web Access Support
- Imagery
- Imagery Server
- Import, Export, Transformation

#### **SIGINT Support**

- Cryptologic Management
- GHOSTWIRE
- SI Correlator SCI Security Lockdowns

### **Major Networking Items:**

• 10/100 (or ATM) NIC providing JWICS access via TS/SCI LAN

#### **Major Hardware Items:**

- Sun Enterprise 450
- UltraSPARC II Processor
- 1GB RAM
- 40 GB Hard Drive
- 32x CD-ROM
- 8 mm Tape Drive

**Approximate Acquisition Cost:** 

\$40,000

## SCI GCCS-I<sup>3</sup> v3.4 UNIX Client



# Configuration

#### **Major Software Items:**

**Basic Build** 

- Solaris 2.5.1 (rev A 11/97)
- DII COE 3.3
- Support Utilities

NRT Track

- Unified Build 3.0.2.5
- JMTK 1.0.0.10
- Data Link Interfaces
- COP Management Software Intel Shared Data Server
- Sybase Client Access
- VADIR/TACDM

Imagery Support

Client Imagery Apps

**SIGINT Support** 

- Cryptologic Management
- GHOSTWIRE SCI Security Lockdowns

### **Major Networking Items:**

• 10/100 (or ATM) NIC providing JWICS access via TS/SCI LAN

### **Major Hardware Items:**

- Sun 10
- UltraSPARC IIi Processor
- 256 MB RAM
- 18 GB Hard Drive
- 32x CD-ROM
- 8 mm Tape Drive



**Approximate Acquisition Cost:** 

\$20,000

## SCI GCCS-I<sup>3</sup> v3.4 NT Client



# Configuration

#### **Major Software Items:**

**Basic Build** 

- NT 4.0 (SP 6A)
- Support Utilities NRT Track Mgt
- C2PC

**ISDS** Access

- Intel Office
- Sybase Open Client & ODBC
- Hummingbird Exceed Imagery Support
- Image Viewer
- Video Ingestion and DisseminationSCI Security Lockdown

### **Major Networking Items:**

• 10/100 (or ATM) NIC providing JWICS access via TS/SCI LAN

#### **Major Hardware Items:**

- Pentium III or better
- 256 MB RAM
- 4 GB Hard Drive
- 32x CD-ROM
- 8 mm Tape Drive



**Approximate Acquisition Cost:** 

\$4,000

### SCI GCCS-I<sup>3</sup> v3.4 Milestones and Status



- System Configuration Complete (OCT 01)
  - Deployments IRT OEF Tasking
- SCI GCCS-I<sup>3</sup> v3.4 has not completed DoDIIS T&E
  - Original schedule called for JITF Entry in JAN-FEB 02
  - IMA was called out by name by CENTCOM and EUCOM to support OEF
  - Deployment scheme requires Site System Security Certification immediately following installation
- Components of SCI GCCS-I<sup>3</sup> v3.4 have been deployed to 6 locations and are supporting approximately 60 trained users
- Plans to deploy SCI GCCS-I<sup>3</sup> v3.4 are in the works for additional locations
- Follow on version SCI GCCS-I<sup>3</sup> v3.5, now the intended subject for DODIIS T&E, 3QFY02 Timeframe



# SCI GCCS-I3 v3.5 - New Release

## SCI GCCS-I<sup>3</sup> v3.5 Overview



- USCENTCOM, acting as ISSG chair, has issued requirements for urgent upgrades of SCI GCCS-I<sup>3</sup> v3.4, which are driving the v3.5 configuration.
- SCI GCCS-I<sup>3</sup> v3.5 will address the following:
  - Integration of expanded SIGINT functionality
  - Integration of expanded functionality to support
     CIP production and dissemination
  - Correct known interoperability problems
  - Implementation of enhanced SCI-level security configuration

# SCI GCCS-I<sup>3</sup> v3.5 Software Changes



### Solaris (Server/Client)

- ITS (Imagery) server fixes
- ISDS (MIDB) Upgrades
- New CUB/Gale/GLIS Segments
- UB Upgrade
- S309/C103 message decoder segments
- Secure Shell to replace TELNET & RLOGIN
- CD-ROM installation upgrades
- SUDO, JDSEC1 upgrades

### NT (Workstation)

- Intel Office Upgrade
- Compressor: required for NTSC--MPEG conversion
- New JTT 2.0
- Imagery Segments Upgrade
- UNIX File Sharing from NT Clients

# Testing and Certification for SCI GCCS-I<sup>3</sup> v3.5



- Will request accelerated T&E Process to support urgent operational requirements
  - JTPM: 30 JAN 02
  - Currently working build schedule, estimate configuration ready to enter JITF/JITC/Security testing in 3QFY02
  - Perform accelerated set of T&E activities based on build schedule and DoDIIS DeXA for T&E schedules
  - USCENTCOM to serve as Beta II site